

GAO

United States General Accounting Office

Report to the Honorable  
Charles E. Grassley, U.S. Senate

AD-A278 887



April 1994

## DOD BUDGET

# Evaluation of Defense Science Board Report on Funding Shortfalls



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United States  
General Accounting Office  
Washington, D.C. 20548

National Security and  
International Affairs Division

B-238512

April 20, 1994

The Honorable Charles E. Grassley  
United States Senate

Dear Senator Grassley:

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This report responds to your February 23, 1993, request that we evaluate the reasonableness of the findings and recommendations of the Defense Science Board Task Force on the fiscal years 1994-99 Future Years Defense Program (FYDP). You also requested that we assess the Department of Defense's (DOD) FYDP for fiscal year 1994, and we issued a report to you in August 1993 on our assessment.<sup>1</sup>

## Background

In February 1993, the Secretary of Defense convened a Defense Science Board task force, which became known as the Odeen panel,<sup>2</sup> to review the fiscal years 1994-99 FYDP that DOD prepared in late 1992 and determine the validity of funding assumptions made in this plan. The task force was asked to assess the (1) savings from the Defense Management Review Decisions (DMRD); (2) development and acquisition costs for the weapons, sensors, and other major systems now in development, including any potential procurement "bow wave"<sup>3</sup> beyond fiscal year 1999; (3) operation and maintenance (O&M) funding levels to support the planned force structure and projected personnel levels; (4) environmental cleanup and compliance costs; and (5) defense health care costs.

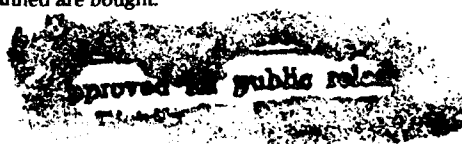
The task force issued its initial report on May 3, 1993, and a second report on June 29, 1993. The task force's assessment was based on staff papers prepared for each issue, briefings by Office of the Secretary of Defense (OSD) staff members and the military departments, meetings with various parties, and audit reports and other relevant material. The task force did not attempt to independently evaluate the accuracy of the data, but it did attempt to cross check the data as best it could in the limited time it had to complete its assessment.

DOD QUARTERLY BUDGET REVIEW

<sup>1</sup>DOD Budget: Future Years Defense Program Needs Details Based on Comprehensive Review (GAO/NSIAD-93-250, Aug. 20, 1993).

<sup>2</sup>The panel was chaired by Philip A. Odeen and included Edward C. Aldridge and Jeffrey H. Smith.

<sup>3</sup>The "bow wave" describes future procurement costs that would accrue if all weapon systems currently planned are bought.



The task force concluded that there could be a \$12.6 billion to \$16.7 billion shortfall between the defense budgets and FYDPs prepared by DOD in late 1992 for fiscal years 1994-97 and the DOD costs the task force projected for those years. The task force also projected additional potential budget shortfalls of \$7.4 billion to \$9.8 billion in fiscal years 1998 and 1999. Overall, the task force's estimated shortfall for the 1994-99 FYDP could be between \$20 billion and \$26.5 billion. The task force also concluded that a shortfall in O&M funding existed but did not provide an estimate. Rather, it concluded that, with intensive management, the services and defense agencies should be able to absorb any shortfall without degrading the readiness of military forces.

Since the defense budget was amended in early 1993, in anticipation of a \$10 billion shortfall for fiscal years 1994-97, the task force determined that a net \$2 billion to \$5 billion shortfall should be expected.<sup>4</sup> On the basis of the task force's estimate, the Secretary of Defense decided to add \$5 billion to the defense budget projections for fiscal years 1995-97.

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## Results in Brief

Our analysis showed that the task force's estimated overall shortfall generally was on the low side but within the range of potential shortfalls presented to it by DOD officials. Table 1 shows the task force's shortfall estimates for fiscal years 1994-99 and the potential shortfall we identified based on the data that was presented to the task force. External studies and reports by us and other audit agencies suggest that the budget shortfall could be significantly greater than the amounts estimated by the task force.

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<sup>4</sup>The task force issued a subsequent report identifying an additional potential shortfall of over \$1 billion in DOD health care funding for the 1994-97 period. No further revision of funding was made.

**Table 1: Potential Defense Budget Shortfall**

Dollars in billions

Source of shortfall	Task force estimate			Briefing estimates <sup>a</sup>
	1994-97	1998-99	Total	1994-99
DMRDs	\$9.0-\$11.0	\$5.0	\$14.0-\$16.0	\$0-\$32.2
Acquisition costs	2.0-3.0	1.0-2.0	3.0-5.0	2.5-46.4
Environmental costs	1.0-1.5	1.0-2.0	2.0-3.5	5.1-8.8
Defense health care costs	0.6-1.2	0.4-0.8	1.0-2.0	0-0.7
<b>Total</b>	<b>\$12.6-\$16.7</b>	<b>\$7.4-\$9.8</b>	<b>\$20.0-\$26.5</b>	<b>\$7.6-\$88.1</b>

<sup>a</sup>We compiled this range of estimated shortfalls based on the data in the briefings presented to the task force.

In addition, the task force was presented with information that showed a potential shortfall risk for O&M funding ranging from \$68.5 billion to \$241.4 billion. The task force did not estimate the shortfall in O&M funding in the fiscal years 1994-99 FYDP. However, it did conclude that a shortfall existed and appeared to affect funding for base and facilities support, but not operational readiness. The task force stated that any shortfall in O&M funding could be absorbed by the services and defense agencies without degrading the readiness of military forces. To avoid degrading readiness, the task force felt that the services would have to undertake an aggressive effort to reduce their base and support structure and other overhead costs. The services and defense agencies have expressed concerns about the impact of the shortfall. Our work indicates that the services and defense agencies can absorb some reductions in O&M funding without affecting readiness.

The task force's report and information presented to the task force indicated that in a number of instances, such as failure to achieve DMRD savings, funding shortfalls would have to be absorbed by the services. This would result in de facto budget cuts as programs were scaled back to offset higher costs.

The Chairman of the task force stated that our report was a fair evaluation of the task force's study, and in most cases where he did not agree, he felt our perspective was a legitimate one. (See app. I.) DOD agreed with much of the information in the report but noted that there were several areas where correction and/or clarification was required. These areas included shortfalls for DMRDs; weapons system acquisition; and O&M, which DOD did

not believe would ever approach the higher ranges forecast by the officials who briefed the task force. (See app. II.) We included these higher ranges in this report to show the complete range of potential shortfalls that the task force addressed. We have, however, revised the report as appropriate to reflect the Chairman's and DOD's comments.

## Defense Management Report Decisions

The 1989 Defense Management Report proposed a series of consolidations and management improvements that were estimated to save tens of billions of dollars in support and overhead programs. The report resulted in 250 decisions to implement consolidations, improve information systems, enhance management, and employ better business practices. The projected savings from individual DMRDs range from a few million dollars to over \$10 billion; some of the actions are one-time savings, and others are recurring savings. Total DMRD savings estimates for the 1991-97 period have ranged as high as \$71.1 billion, but because of program and force reductions, the savings estimates presented to the task force were revised to \$62.8 billion.

The task force concluded that DOD overstated the savings that could realistically be expected from the DMRDs during fiscal years 1994-97 by \$9 billion to \$11 billion. The task force further estimated an added annual shortfall of \$2.5 billion for fiscal years 1998 and 1999 based on its extrapolation of estimated 1997 DMRD savings.

Regarding the 1994-97 shortfall, the task force used three independent methods to establish a range of shortfalls, since it did not have the personnel and time needed to review all 250 DMRDs. First, the task force conducted a detailed review of 10 of the larger DMRDs and found 25 percent of the anticipated savings at risk. It applied this percentage to the total OSD Comptroller's expected DMRD savings for 1994-97 of \$46 billion to come up with a shortfall of about \$11 billion for this period.

Second, the task force focused on the OSD Comptroller's savings estimates. The task force grouped the estimates into three categories and assigned a probability of success for each category. For example, the task force found that service initiatives comprised \$16 billion of the OSD Comptroller's estimate, and it believed the probability for achieving the projected savings was 90 percent. When the estimates and probabilities for success for all three categories were determined, the task force concluded that a shortfall of \$10.6 billion would result.

Last, the services presented briefings to the task force estimating the proportion of DMRD savings that were not achievable. The task force report stated that the services believed that, on average, about 20 percent of the DMRD savings were not achievable. The task force applied this 20-percent figure to the \$46 billion savings estimate for fiscal years 1994-97 to yield a \$9.2 billion shortfall estimate.

## Our Evaluation

On the basis of our analysis of prior DMRD-related reports and briefing information presented to the task force, the task force report's \$9 billion to \$11 billion shortfall estimate is within the range to be expected, but it is low compared with the worst-case estimates projected by the briefing officials. The OSD Comptroller's office expressed confidence that \$32.6 billion would be achieved during fiscal years 1991-97 because of actions already started. It further estimated that as much as \$30.2 billion was not yet achieved because other management initiatives had not been fully implemented. After deducting the amounts attributable to fiscal years before 1994 and adding the amounts for fiscal years 1998 and 1999, we believe that unrealized anticipated savings may be as high as \$32.2 billion for fiscal years 1994-99.

Even though the task force report stated that, on average, 20 percent of the anticipated savings were not achievable, the Air Force and the Army presented much higher estimates of potential shortfalls. The worst-case expectations involved Army and Air Force concerns that they were only able to validate about half of their anticipated savings. The Navy reported that it expected to achieve 80 percent of its savings.

The services cited several reasons why some DMRD savings might not accrue during fiscal years 1994-97, including delays in developing implementation plans and their belief that some savings estimates were not reasonable. On the other hand, the services and defense agencies did not rule out the possibility of realizing all of the projected DMRD savings plus some additional unscheduled savings.

In past work on DMRDs, we have also questioned whether all of the estimated DMRD savings could be achieved.<sup>6</sup> Our past work on specific initiatives found that up to 82 percent of the planned savings were based

<sup>6</sup>Defense Management Review (GAO/NSIAD-94-17R, Oct. 7, 1993), Financial Management: DOD Has Not Responded Effectively to Serious, Long-standing Problems (GAO/T-AIMD-93-1, July 1, 1993), Defense Business Fund (GAO/AFMD-93-52R, Mar. 1, 1993), National Security Issues (GAO/OGC-93-9TR, Dec. 1992), and Defense ADP: Corporate Information Management Savings Are Not Supported (GAO/IMTEC-91-18, Feb. 22, 1991).

solely on management judgment and were not always supported by historical facts or empirical cost data.

Our work in one major area indicates the difficulty in achieving the DMRD savings. This area, the Corporate Information Management (CIM) initiative,<sup>6</sup> affects 28 other DMRD initiatives that comprise a major portion of DMRD savings expected by 1997. DOD began this initiative nearly 4 years ago but has yet to demonstrate any discernable progress toward its goal of achieving substantial savings.<sup>7</sup> Moreover, DOD has neither an implementation plan or schedule for CIM nor a cost-benefit analysis. This suggests that the potential DMRD savings shortfall may be far greater than the information presented to the task force indicated.

The task force noted that DMRD savings are projected for the outyears and are deducted from current budget requests. Actual appropriations are reduced by the projected savings, even if actions to achieve these savings have not occurred. If these savings do not occur, readiness may be degraded or funds may have to come from other budget areas. The task force also found that DMRD savings were now intertwined with larger changes in total program funding and force structure and suggested that the DMRD savings tracking system be terminated.<sup>8</sup>

## Weapon Systems Acquisition

The task force determined that the weapon systems cost estimates for selected major acquisition programs in the 1994-99 FYDP seemed, for the most part, to be realistic and therefore projected only a \$2 billion to \$3 billion shortfall through fiscal year 1997 and a \$1 billion to \$2 billion shortfall in fiscal years 1998 and 1999. The task force attributed about half of the shortfall to the Titan IV program, which it believed was underfunded by \$1 billion to \$2 billion. Other programs that the task force found to be underfunded (by unspecified amounts) included the Navy's shipbuilding program, several Air Force programs (including JSTARS and the B-1B bomber), and smaller Army programs. In addition, the task force was concerned about technical and cost problems that could not be foreseen at

<sup>6</sup>The CIM initiative entails a major effort to improve defense operations and administrative support by streamlining business processes, upgrading information systems, and improving data administration and other technical areas.

<sup>7</sup>Defense IRM: Management Commitment Needed to Achieve Defense Data Administration Goals (GAO/AIMD-94-14, Jan. 21, 1994) and Defense ADP: Corporate Information Management Must Overcome Major Problems (GAO/IMTEC-92-77, Sept. 14, 1992).

<sup>8</sup>On August 2, 1993, OSD issued a memorandum that effectively terminated the tracking of DMRD savings. DOD officials said that they were continuing to keep track of actions to implement the savings.

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the time of its assessment and recommended future hedge funding to cover any unanticipated problems, but it did not specify the amount needed.

The task force also predicted that DOD faced a procurement bow wave of approximately \$5 billion a year by the early 2000s. The task force concluded that currently planned tactical aircraft programs and the Navy's shipbuilding program should be reassessed because it believed that the current programs would probably not be affordable after fiscal year 1999.

Subsequent to the task force's report and as a result of the Bottom-Up Review, the Secretary of Defense canceled the Air Force's multi-role fighter program and the Navy's attack/fighter aircraft program. The Secretary also made plans to terminate the Air Force's F-16 program in 1994 and the Navy's F/A-18C/D program after 1997. We have not evaluated the effect of these decisions on the bow wave.

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## Our Evaluation

Our analysis of the information presented to the task force suggests that the task force report's estimate of probable shortfall is low. Historically, DOD has experienced cost overruns in its acquisition programs and has undertaken initiatives to control costs. The task force's estimate appears to endorse these DOD efforts and is optimistic that DOD's acquisition process will be able to prevent future cost overruns. Some studies presented to the task force suggest otherwise, as does our work on the procurement of major weapon systems.

We found that the task force was presented with information that showed the risk for acquisition shortfalls could range from \$2.5 billion to over \$46.4 billion. Of nine formal acquisition briefings presented to the task force by DOD components, three briefings by DOD's Cost Analysis Improvement Group (CAIG) focused on acquisition cost issues.

One of the CAIG's cost briefings presented information on several major defense acquisition programs currently under contract, such as the B-1B bomber and M1A2 tank, that showed shortfalls for 18 of the programs could range from \$2.5 billion to \$9 billion for the FYDP period. The shortfalls included about \$2.5 billion for items it identified as current liabilities or "must pay" items, such as ongoing engineering changes or program modifications. It also identified about \$6.5 billion in "must fix" estimates for the 18 programs. These costs were for identified, but not immediate, problems, such as engineering changes that could be mitigated



by future events or other cost savings initiatives. The task force's report does not explain why the task force did not include these projected shortfalls, although it appears that these costs will almost certainly have to be paid.

A second CAIG briefing addressed the risk for potential acquisition shortfalls for 116 major defense acquisition programs valued at \$221 billion. The CAIG estimated FYDP acquisition shortfalls at less than 5 percent of the \$221 billion—\$9 billion. CAIG officials said this shortfall could be mitigated by future cost savings projected for the FYDP period as a result of DMRDs calling for improved acquisition management and oversight, a streamlined process, use of off-the-shelf technologies, and other such initiatives.

A third CAIG briefing indicated that, on the basis of comprehensive longitudinal studies commissioned by OSD's Office of Program Analysis and Evaluation, higher potential acquisition shortfalls were possible. These studies, which were based on historical studies of 197 major weapon systems conducted by the RAND Corporation and the services' cost centers, found historical acquisition cost growth of about 21 percent. Applying the 21-percent cost growth estimate to the 116 major defense acquisition programs that account for \$221 billion in defense acquisition costs,<sup>9</sup> yields a potential shortfall of over \$46.4 billion. Even though this shortfall amount does not recognize any savings associated with subsequent program reductions or cancellations, it also does not include any cost growth for the smaller defense acquisition programs not included in the \$221 billion.

Past studies by the DOD Inspector General and others have continually identified problems with underestimates in weapon system costs. Since March 1971, our work has resulted in over 900 reports and testimonies on almost all aspects of weapon systems acquisitions. We have found that program cost increases of 20 to 40 percent have been common on major weapon programs and that some programs have experienced even greater increases.<sup>10</sup> Our reviews of ongoing weapon programs have shown that major programs continue to incur cost increases and overruns. For example, in March 1993, we testified that costs were continuing to increase on the Air Force's C-17 aircraft program,<sup>11</sup> and in August 1993, we

<sup>9</sup>These cost increases were based on the fiscal year 1993 budget request and FYDP.

<sup>10</sup>Weapons Acquisitions: A Rare Opportunity for Lasting Change (GAO/NSIAD-93-15, Dec. 1992).

<sup>11</sup>Military Airlift: Status of the C-17 Development Program (GAO/T-NSIAD-93-6, Mar. 10, 1993).

reported that costs were continuing to increase on the Navy's SSN-21 submarine program.<sup>12</sup>

Notwithstanding past cost overruns, DOD officials said that cost estimation had become much more accurate and that past practices of underestimating costs had all but been eliminated. However, if cost increases persist, we believe that weapon systems acquisition shortfalls could total substantially more than the task force projected.

In commenting on a draft of this report the Chairman of the task force noted that, in response to the Secretary of Defense's and other senior leaders' concerns, the task force focused on the handful of new systems that are in the outyear program. The Chairman further noted that the task force pointed out that there was a great deal of uncertainty about all weapons costs because of the rapid decline in the defense business base of many companies; that there were few reserves in most of the major programs to absorb unexpected problems; and that a serious effort had been made to fully fund projected costs. We have noted that the task force examined selected, rather than all, acquisition programs and that it was briefed on a broader range of programs, which we included in our analysis.

## Environmental Cleanup and Compliance

The task force projected a shortfall of \$1 billion to \$1.5 billion in funding for environmental costs for fiscal years 1994-97 and \$1 billion to \$2 billion from fiscal years 1998 to 1999. Between fiscal years 1994 and 1997, DOD plans to spend approximately \$18.6 billion on environmental costs. These costs are split almost equally between cleanup program funds, which are used to fix problems at active or closed bases that are not included under the Base Realignment and Closure list or on ships, and compliance program funds, which are used to resolve pollution problems and comply with current state and federal regulations. The services believed that compliance costs would begin to decline during this period because of corrective actions underway.

The task force did not accept DOD's view that funding for compliance activities would decline and believed that funding for these activities from fiscal years 1994 to 1997 was unrealistic, since new problems would very likely be discovered and more stringent regulations would be enacted.

<sup>12</sup>Navy Ships: Problems Continue to Plague the Seawolf Submarine Program (GAO/NSIAD-93-171, Aug. 4, 1993).

The task force found that funding for base cleanup activities for bases on the Base Realignment and Closure list and for existing and old bases was probably adequate. However, it cautioned that costs might rise as the services actually begin to cleanup the bases. In addition, the task force recommended that DOD pursue any new technology that would help reduce the cost of future cleanup or compliance activities.

## Our Evaluation

Our analysis of information presented to the task force, as well as past defense environmental studies, indicated that DOD's environmentally related shortfalls could range from about \$5.1 billion to about \$8.8 billion for fiscal years 1994-99. The task force's report concluded that the shortfall would total between \$2 billion to \$3.5 billion for the same period. These amounts are considerably less than the low end of the range of potential shortfalls DOD presented to the task force.

The range DOD presented to the task force represented a high and low estimate of the potential shortfall. The major factors that contributed to the shortfall included inadequate funding for known environmental compliance and Navy and Air Force environmental restoration, as well as concerns about the ability to achieve environmentally related DMRD savings.

DOD officials identified a number of factors that could further increase environmental costs but did not quantify them. These factors included increases in future environmental costs if research and development efforts do not result in cost savings technologies and the effect of potentially unmet allied burdensharing commitments on cleanup of overseas military bases.

We have issued several reports on environmental cleanup and compliance issues indicating that total environmental costs could be higher than DOD estimates.<sup>13</sup> Even though DOD estimates its future cleanup costs at about \$25 billion, we reported that the actual cost could not be determined because not all sites have been identified, contamination studies have not been completed, additional work is required at some installations, and the longer cleanup activities take the more expensive they will be. DOD's estimates for compliance costs also do not include all expenses. Although

<sup>13</sup>Environmental Compliance: Guidance Needed in Programming Defense Construction Projects (GAO/NSIAD-94-22, Nov. 26, 1993), DOD Environmental Cleanup: Information on Contractor Cleanup Costs and DOD Reimbursements (GAO/NSIAD-92-253FS, June 26, 1992), and Hazardous Waste: DOD Estimates for Cleaning Up Contaminated Sites Improved but Still Constrained (GAO/NSIAD-92-37, Oct. 29, 1991).

DOD estimates that its compliance costs will decline between fiscal years 1993 and 1999, we believe they are likely to increase because new requirements cannot always be predicted and DOD has generally underestimated costs to comply with environmental regulations. For example, the Clean Air Act will drive future environmental costs upward. Because of amendments to the act, DOD will need to track almost 200 pollutants rather than the 8 major pollutants that it was previously required to track.

Estimates for reimbursements to contractors may also represent substantial environmental costs, but DOD has not taken steps to estimate these costs to assist managers in developing program budgets and to provide Congress with an idea of future funding liabilities. For example, officials of the 15 largest defense contractors have estimated their combined defense and non-defense cleanup costs would total \$2.1 billion. Because DOD does not routinely collect information on its projected costs from contractors, we found it cannot properly budget for future cleanup costs.<sup>14</sup>

In commenting on a draft of this report, the Chairman of the task force noted that with regard to the remediation of existing environmental problems, the issue is how long you are willing to take and at what pace you are willing to clean up existing sites. The Chairman further noted that if you want to clean up faster, you can spend more, but the task force did not think this was prudent given the declining defense budget. The material presented to the task force and our work on environmental cleanup and compliance issues suggests that spending on both cleanup and compliance could exceed the task force's estimate.

## Defense Health Care

The task force found that funding for DOD health care programs was underestimated by about \$600 million to \$1.2 billion for fiscal years 1995-97 and an additional \$400 million to \$800 million between fiscal years 1998 and 1999. The report does not detail the methodology used to derive this estimate. To mitigate the shortfall, the task force reported that DOD could (1) reduce delivery costs by cutting the number of staff and using improved information systems and procurement practices, (2) end costly special programs that provide benefits that exceed many private plans, (3) discourage unnecessary use of medical services by increasing deductibles and copayments for active and retired participants, and (4) bill

<sup>14</sup>Environmental Cleanup: Unresolved Issues in Reimbursement to DOD Contractors (GAO/T-NSIAD-93-12, May 20, 1993).

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Medicare for costs incurred by eligible recipients who use the military medical system.

The task force also noted several factors that could drive up future health care costs. First, the same factors that are driving up health care costs in the U.S. economy also affect DOD's health care system. Second, Congress has added new benefits or mandated more generous benefits and refused to permit cuts in the number of medical personnel. Last, as medical costs for military retirees and their dependents increase under private plans, more retirees will opt to use DOD's health care services. About 50 percent of those eligible now use DOD's health care system. If DOD's health care system is not properly funded to accommodate these increased costs, the shortfall reported by the task force could increase.

The task force also stated that DOD should consider the results of OSD's review of DOD's health care system for ideas on how it can manage the system in a more effective manner. (The review was not complete when the task force was conducting its assessment.) In addition, the task force indicated that DOD should be aware of potentially costly repercussions from the health care reform being considered by the White House.

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## Our Evaluation

Our analysis of the information presented to the task force suggested that the task force's estimate might have been pessimistic. The task force received conflicting information, and it is unclear what method the task force used in the report to determine the shortfall. We found that the information presented indicated that a total shortfall of up to \$712 million for fiscal years 1994-99 may occur.

The DOD Comptroller's office told the task force that it anticipated defense health to realize savings in the future from cost-cutting initiatives. Alternatively, in briefing the task force, DOD's Office of Health Affairs indicated that a \$712 million shortfall in funding for health care programs could occur. Our previous work on DOD health care has not focused on potential shortfalls.

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## Operation and Maintenance

The task force did not estimate the precise shortfall in O&M funding in the fiscal years 1994-99 FYDP. However, it did conclude that a shortfall existed and appeared to affect funding for base and facilities support but not operational readiness. The task force noted the services stated that they had adequately funded the programs to ensure readiness of their forces.

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The task force noted that existing O&M funding might be adequate if enough military bases and facilities are closed.

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## Our Evaluation

Our analysis of information presented to the task force suggests that the O&M funding shortfall may be much greater than any of the other categories addressed by the task force. We have not determined whether O&M shortfalls of the magnitude presented to the task force would impact readiness. In commenting on a draft of this report, the Chairman of the task force noted that the task force made it clear that if the services were going to live within the FYDP O&M funds without degrading readiness, an aggressive effort to reduce the base and support structure and other overhead costs was essential.

We calculated that the task force was presented with information that showed that DOD will have a potential shortfall in O&M funding of at least \$68.5 billion and as much as \$241.4 billion during fiscal years 1994-99. The officials briefing the task force were concerned about a gap they believed existed between requirements and funding for many O&M activities, such as plant replacement, maintenance backlogs, and base closures. Our higher estimate is a compilation of shortfalls that would occur if the most pessimistic of all the services' projections materialize and if the services do not receive all of their expected O&M account reimbursements.

The briefings indicated that readiness would remain a priority and that funding reductions would occur through a decline in the force structure and in non-readiness expenditures, such as housekeeping items and low-priority maintenance. However, the services argued that these less urgent unfunded requirements and any shortfalls would eventually have to be filled (e.g., fixing the roofs of buildings before they collapse).

The task force's contention that the services could absorb O&M funding shortfalls is partially supported by our recent work. We reported that the services and defense agencies could absorb a \$6.7 billion reduction in 1994 O&M budget requests.<sup>15</sup> We identified 20 O&M program categories that could absorb budget reductions or rescissions. For example, excesses existed in spare and repair parts inventories in all three services and budget reserves existed in the Navy and the Air Force. Our work did not show if potential reductions in future years would be feasible, but we plan to review DOD infrastructure issues.

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<sup>15</sup>1994 DOD Budget: Potential Reductions to the Operation and Maintenance Programs (GAO/NSIAD-93-295BR, Sept. 16, 1993).

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## Scope and Methodology

We reviewed the two published reports of the Defense Science Board Task Force. We also examined briefings and documentation provided to the task force by the services and defense agencies and discussed this information with officials of the Office of the Assistant Secretary of Defense for Program Analysis and Evaluation. Additionally, we examined our and other audit agencies' studies and reports on DMRDS, major weapon system acquisition programs, environmental cleanup, defense health, and O&M programs.

We conducted our work between June and December 1993 in accordance with generally accepted government auditing standards.

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We are sending copies of this report to the Secretary of Defense, appropriate congressional committees, and other interested parties. We will also make copies available to others on request.

Please contact me at (202) 512-3504 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix III.

Sincerely yours,



Richard Davis  
Director, National Security Analysis





# Comments From the Chairman, Defense Science Board Task Force



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BDM/MCL-PAO-03347-94

March 24, 1994

Mr. Richard Davis  
Director, National Security  
Analysis  
United States General  
Accounting Office  
Washington, DC 20548

Dear Richard:

I appreciate the chance to review your draft comments on the "Odeen Report" as well as the opportunity to meet with you and your colleagues to discuss the report. It enabled me to provide my perspective on the issues you raised. In general I thought it was a fair assessment of the study, and in most cases where I didn't agree I felt that your perspective was a legitimate one. There were a few areas where I felt you didn't understand the thrust of our report or I disagreed with the position taken by the GAO. I have outlined below the few areas in which I believe there are substantive differences.

## WEAPON SYSTEMS COSTS

The concern expressed to us by Secretary Aspin and other senior leaders was not the adequacy of funding for the entire procurement account, but rather the reasonableness of funding plans for major weapons systems in the FYDP. Therefore, we focussed on the handful of new, large systems that are in the outyear program. As you know, there are only a few new systems planned in addition to those that are already in production whose costs are quite predictable. As we noted, we had a few specific concerns (e.g., Titan IV), and we felt there was likely underfunding of \$2B-\$3B over the FY94-97 time period for these weapons. We did point out, however, that there was a great deal of uncertainty about all weapons costs, not because of poor estimating, but because of the rapid decline in the defense business base of many companies. This has the potential for sharp increases in overhead and G&A rates, as these costs are spread over fewer direct costs. We had no way to quantify this, but did cite it as an issue of real concern. We also pointed out that there were few management reserves in most of the major programs to absorb unexpected problems. On the other hand, we did believe that the Bush Administration had made a serious effort to fully fund their projected costs in the FYDP, something that had not always been done in the past.

Appendix I  
Comments From the Chairman, Defense  
Science Board Task Force

**BDM**

Mr. Richard Davis  
BDM/MCL-PAO-03347-94  
March 24, 1994  
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O&M COSTS

The Service briefings identified a number of potential funding problems in the O&M area, primarily in the Army's O&M budget related to base maintenance. We understand these concerns but felt given the absolute size of the O&M budget, the relatively small decline in O&M funding since the mid 1980s, and the fact that O&M dollars per person or major combat unit had increased significantly during this period, that overall O&M funding levels were adequate and that it would not be a prudent management decision to shift more money to O&M. Funds for the military personnel and investment categories ought to be sustained and not shifted to O&M. I should note that we were repeatedly told by senior military leaders that readiness had not deteriorated and that the O&M funding was adequate to maintain readiness.

We did make it clear that if the Services were going to live with the FYDP O&M funds without degrading readiness, an aggressive effort to reduce the base and support structure and other overhead costs was essential. The 1995 base closure (BRAC) program and efforts underway in all the Services to reduce support infrastructure are crucial to DOD's ability to live with outyear O&M budgets. If aggressive management actions are taken, we felt the funding in the O&M area is adequate to preserve a ready and effective force for the FY94-97 period.

ENVIRONMENTAL COSTS

In our report we cited two primary areas of environmental spending: (1) fixing compliance problems and (2) cleaning up past environmental problems. We recommended that the FYDP be adjusted (adding \$1B-\$1.5B in FY94-97) to hold compliance spending at current levels, rather than letting it decline over time. It is difficult to forecast compliance costs, but we felt that the FYDP assumption of declining spending was unrealistic, and adjustments to hold spending at the current roughly \$2B a year level should be adequate.

With regard to the remediation of existing environmental problems, the issue is how long you are willing to take and at what pace you wish to clean up existing sites. The potential costs are very large, but given the overall size of the DOD future budget, we believed that continuing to spend approximately \$2B per year (the FYDP Program) would be a prudent program. Each year the priority would go to cleaning up the more serious problems or cases where other uses for the facility exist. It would take years, probably decades, to clean up all the problems, but in most cases DOD environmental contamination (largely oil and solvent spills) is not hazardous to health and therefore a moderate pace is acceptable. Obviously, if you want to clean up faster, you can spend more. But we did not think this was prudent given the declining defense budget.

Appendix I  
Comments From the Chairman, Defense  
Science Board Task Force

**BDM**

Mr. Richard Davis  
BDM/MCL-PAO-03347-94  
March 24, 1994  
Page 3

MEDICAL COSTS

It appears that we are very close in our estimates in the area. I don't believe any of us can forecast medical costs with enough precision to argue over a difference of a few hundred million dollars in a \$148 medical budget. But, in general we felt the FYDP funding was reasonable.

I hope the above comments are helpful. If you have any further questions, please contact me.

Sincerely,



Philip A. Odeen  
President and CEO

cc: David McNicol  
Edward C. Aldrich  
Jeffrey H. Smith

# Comments From the Department of Defense

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



OFFICE OF THE COMPTROLLER OF THE DEPARTMENT OF DEFENSE

WASHINGTON, DC 20301-1100

MAR 24 1994

Mr. Frank C. Conahan  
Assistant Comptroller General  
National Security and International  
Affairs Division  
U.S. General Accounting Office  
Washington, D.C. 22548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DOD BUDGET: Evaluation of Defense Science Board Task Force Report," dated March 9, 1994 (GAO Code 701019), OSD Case 9629. The DoD partially concurs with the report.

While the Department agrees with much of the information contained in the draft, there are several areas where correction and/or clarification is required. In discussing the Defense Management Report Decision savings on page 6 of the draft, the report says that the Office of the DoD Comptroller "estimated that as much as \$30.2 billion may not be achieved" during the FY 1991-1997 period. The report goes on to assert that unrealized FY savings may be as high as \$37.3 billion. In fact, the DoD Comptroller did not say that \$30.2 billion may not be achieved. Rather, the Office of the Comptroller was making estimates, based, for the most part, on initiatives yet to be fully implemented, about the savings that were yet to be realized. As with all estimates, it is possible to argue that the estimate is too high. The Odeen panel said that it believed the savings to be achieved were very likely \$9 to \$11 billion below the \$62.8 billion figure. The Department has accepted that estimate. As for the high estimate, it is always possible to argue that the worst case may occur. It is equally plausible to argue that more savings might be achieved than estimated.

On page 7 of the draft report, the GAO cites the Corporate Information Management initiative as an example of the difficulty in achieving the Defense Management Report Decision savings. According to the draft, the Corporate Information Management initiative affects 28 other Defense Management Report Decision initiatives that comprise a major portion of the \$36 billion in savings expected by 1997. There are two problems with the GAO discussion. First, the largest amount of Corporate Information Management initiative savings contained in the Defense Management Report Decisions is from Decision 918. However, the savings contained in Defense Management Report Decision 918 were not included in the \$71.1 billion or \$62.8 billion estimates considered by the Odeen panel. The Odeen panel did review Decision 918, but that initiative was for FY 1994, beyond the time period for all the other Defense Management Report Decisions.

See comment 1.

Now on p. 5.

See comment 2.  
Now on p. 6.

Appendix II  
Comments From the Department of Defense

Second, the \$36 billion estimate is not a validated figure. The estimate was based on a statement made by a DoD official that Corporate Information Management initiative or systems savings could account for one-half of the Defense Management Report Decision savings. That figure, however, has not been documented or otherwise validated within the Department.

See comment 3.  
Now on p. 7.

In discussing weapons systems acquisition on page 9 of the draft, the report states that the task force's estimate of a probable shortfall of \$3 billion during the Future Years Defense Program was low. The report applies an historical acquisition cost growth rate of 21 percent against the Major Defense Acquisition Programs, yielding a potential shortfall of \$46.5 billion. That is a gross overestimate of what the 21 percent figure represents. First, much of the increase in previous program costs resulted from decisions to upgrade systems already in production to reflect changes in the threat or to take advantage of technological change. That is not what is ordinarily meant by cost growth. Second, the draft report acknowledges (page 11) that the GAO shortfall estimate does not include any potential program reductions or cancellations, but implies that those reductions may be balanced by cost growth in non-major acquisition programs. Finally, the 21 percent figure reflects average growth in program costs from the Milestone II estimate through the end of the program (adjusted for inflation and the total quantity procured). Cost growth tends to occur in the early portions of engineering and manufacturing development (EMD). Hence, cost growth will tend to be less when the mix of systems is more heavily weighted toward those in production rather than those under development.

See comment 4.  
Now on p. 12.

Concerning the DoD Health Care Program, the draft report states on page 16 that the task force estimate of health care costs may have been pessimistic. The draft goes on to state that the Office of the DoD Comptroller told the task force that \$600 million in Health Affairs funds were reprogrammed in both fiscal years 1992 and 1993, and indicated that the surplus may exist in the following six-year period. In fact, the overall Health Affairs program has increased. Instead of \$600 million being reprogrammed out of Health Care in 1992 and 1993, \$600 million was reprogrammed into Health Care accounts. Further, the high estimate of \$1.8 billion in surplus is not explained, and is not correct, so far as DoD Comptroller and Health Affairs are concerned.

See comment 5.

The potential shortfall in operations and maintenance funding is estimated by the GAO at somewhere between \$68.5 billion and \$241.4 billion during 1994 through 1998. The DoD agrees that a shortfall in operations and maintenance funding is likely. However, the large amount estimated by the GAO, based on what is termed the most pessimistic of all the Service estimates, is unreasonable and is not explained in the draft. The most likely shortfall currently estimated by the Department is \$20 billion. It should also be recognized that the Odeen panel stated that the Services could absorb operations and maintenance funding shortfalls, given other actions that could be taken and

**Appendix II**  
**Comments From the Department of Defense**


that were planned. The GAO draft should provide a more detailed explanation of the GAO projected figures or revise the estimates to reflect more realistic expectations.

The draft report also does not recognize the importance the task force placed on closing installations. Rather than concluding that intensive management by the Services and Defense Agencies would resolve the problem, the draft report should have referred to the task force recommendation for aggressive closings of unneeded bases and facilities through the base realignment and closure process as a method to reduce operations and maintenance requirements and avoid shortfalls. Much of the DoD infrastructure is funded through the operations and maintenance appropriation. As the force structure declines and infrastructure is reduced, there will be a reduced need for operations and maintenance funding.

Finally, the draft does not recognize the changes and progress achieved by the Department since the GAO review began. The DoD has made major policy and program changes, and taken substantial actions as a result of the Bottom Up Review that addressed some of the issues. For example, there is policy guidance now that the FY 1995 Base Realignment and Closure actions should equal all three prior Base Realignment and Closure reductions, thereby very substantially reducing future operations and maintenance costs. There is no acknowledgement in the report of these actions and many others designed to address the issues raised by the report. Therefore, the report leaves the impression that all of the problems remain unaddressed and without solution. That is not a fair portrayal of the DoD position.

The DoD appreciates the opportunity to comment on the GAO draft report.

Sincerely,

  
Alvin Tucker  
Deputy Comptroller  
(Management Systems)

See comment 6.

The following are GAO's comments on the Department of Defense's (DOD) letter dated March 24, 1994.

## GAO Comments

1. We have revised the report to recognize that the DOD Comptroller's office told the task force that \$30.2 billion was yet to be achieved because initiatives had not been implemented. We have also lowered the upper end of our estimated range from \$37.3 billion to \$32.2 billion based on further analysis of the material provided the task force. DOD also noted that the worst case might occur or that more savings might be achieved than estimated. We concluded that the task force report's shortfall estimate was within the range to be expected but that it was low compared with the worst-case estimates projected by the briefing officials.

2. The Corporate Information Management initiative is a top-down effort to simplify and improve functional processes and thereby streamline operations and manage resources more efficiently. As such, it affects several Defense Management Review Decisions (DMRD), and delays in its implementation will adversely affect the realization of DMRD savings. We have, however, deleted the reference to the \$36 billion savings that a DOD official initially attributed to the CIM initiative.

3. DOD stated that much of the increase in previous program costs resulted from decisions to upgrade systems already in production to reflect changes in the threat or take advantage of technological change, which is not what is ordinarily meant by cost growth. DOD further noted that the 21-percent figure reflected average growth in program costs from the beginning of engineering and manufacturing development through the end of the program, adjusted for inflation and the total quantity procured; cost growth tended to occur in the early portions of engineering and manufacturing development; and cost growth would tend to be less when the mix of systems is more heavily weighted toward those in production rather than those under development.

The RAND study stated that it examined many possible factors affecting cost growth and found few strong relationships that would help explain the cost growth outcomes observed. The study further stated that the substantial program-to-program variation suggested that there was no dominant explanatory variable. Even though DOD stated that the study's cost growth figure reflected average growth in program costs adjusted for inflation and the total quantity procured, the study stated that it adjusted its calculations to remove the effect of inflation and quantity changes.

Regarding the mix of programs, although we agree that a number of acquisition programs are nearing completion, a number of new and expensive programs are in early stages of development or are included in the current budget proposal. These include the C-17, F-22, F/A 18-E/F, and V-22 aircraft; the proposed new attack submarine; the CVN-76 aircraft carrier; and the Comanche helicopter. Since major aircraft, submarine, and other systems are still being developed and because our recent work has shown that major programs continue to experience cost growth, we believe that significant cost growth could occur in the future.

4. We have revised the range of potential shortfalls for defense health care based on clarification of the information provided to the task force.

5. We did not estimate the potential shortfall in operations and maintenance funding. We totaled the estimates provided by the services and defense agencies and added the amount of reimbursements that are due to DOD's operation and maintenance (O&M) accounts from other sources to reflect the shortages that would accrue if DOD did not receive these reimbursements. We agree that it is unlikely that the shortfall will ever approach this amount. This report recognizes that the task force noted that existing O&M funding might be adequate if enough military bases and facilities are closed.

6. We agree that a number of changes have occurred since the task force's report was issued and that these changes have the potential to affect potential shortfalls. We state in the report that subsequent to the task force's report and as a result of the Bottom-Up Review, the Secretary of Defense canceled the Air Force's multi-role fighter program and the Navy's attack/fighter aircraft program and made plans to terminate the Air Force's F-16 program in 1994 and the Navy's F/A-18C/D program after 1997.



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